APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,974	09/30/2003	Yen-Fu Chen	AUS920030588US1	4970

			EXAMINER
45371	7590	03/30/2006	TIMBLIN, ROBERT M

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ART UNIT	PAPER NUMBER
2167	

DATE MAILED: 03/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/674,974	CHEN ET AL.
Office Action Summary	Examiner	Art Unit	
	Robert M. Timblin	2167	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

> A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
> - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
> - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
>   Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>30 September 2003</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-29</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-29</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>30 September 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>9/30/2003</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

This office action is responsive to application 10/67,4974 filed 9/20/2003.

Claims 1-29 have been examined and are pending prosecution.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 9/30/2006 is being

considered by the examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 10, 20, and 29 are rejected under 35 U.S.C. 112, first paragraph, as

failing to comply with the enablement requirement. The claim(s) contains subject matter

which was not described in the specification in such a way as to enable one skilled in

the art to which it pertains, or with which it is most nearly connected, to make and/or use

the invention. These claims recite the limitation "responsive to a determination that

database and the hashtable are identical... creating a new XML Schema." In light of

Figure 3 step 214 and the summary of the invention, it is illustrated that if the database

is *not* identical to the hashtable, then a new schema is created. Prosecution has been

based upon the latter statement.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 10, 20, and 29 recite the limitation "the hash table" in the step of comparing the database to the hashtable. There is insufficient antecedent basis for this limitation in the claim. Claims 2-9, 11-19, 21-28, and 30-38 are rejected for fully incorporating the deficiencies of claims 1, 10, 20, and 29 respectively by dependency.

Claim Objections

Claims 1, 10, 20, and 29 are objected to because of the following informalities: There are two occurrences of the phrase "a query interval" in each of the above-cited claims. This leads to confusion as to whether "a query interval" in each phrase identifies the same query interval or separate instances. In the current case, examiner presumes one instance of a query interval.

Claims 1, 10, 20, and 29 are also objected for the minor informality of the repeated "*that that*" in the above cited claims.

Claims 1 and 20 are further objected for the minor informality of the statement of "performing *additional steps*" because only one step is set forth.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ng et al.** ("Ng" hereinafter) (US 6,609,133 B2) in view of **Srivastava et al.** (Srivastava hereinafter (US 2002/0120685 A1)

With respect to claims 1, 11, 20, and 30 **Ng** teaches A method for validating data in a backend driven environment, the method comprising:

'Schema for a database' as querying the database to determine its schema and creating a database structure that reflects the schema (col. 4, lines 19-42).

'upon the occurrence of a query interval, comparing the database to the hashtable' as comparing hash tables of the two database structures (col. 8, lines 10-28).

'determining if the database and the hash table are identical' as determining changes to the database structures (col. 8, lines 10-28).

'responsive to a determination that that database and the hash table are identical, performing additional steps comprising: creating a new XML Schema' as creating a new database data structure based on the new schema (col. 4, lines 35-42).

Ng, fails to teach claimed limitations of creating an XML Schema and designating a query interval.

Srivastava, however, teaches **'creating an XML Schema'** as an XML schema used by the relational database.

'designating a query interval' as specifying the frequency with which the update check is to be performed.

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the teaching of **Srivastava** would have provided Ng's system with ensuring system integrity. Further, Srivastava's teaching ensures proper operation (Srivastava, 0068). Further yet, using XML of Srivastava would have given Ng's system the features to create, test and validate submitted data (0060).

With respect to claims 2, 12, 21, and 31, **Ng** teaches **'copying a database to a hashtable'** as a hashtable representing the database (col. 5, lines 34-67).

With respect to claims 3, 13, 22, and 32, **Ng** teaches **'responsive to a determination that that database and the hashtable are identical, resetting the query interval'** as comparing fields in the hash table to identify database changes (col. 8, lines 10-28).

With respect to claims 4, 14, 23, and 33 **Ng** teaches **'deleting the hashtable and saving the database as a new hashtable'** as adding and deleting entries in the hash table (col. 8, lines 42-58).

With respect to claims 5, 15, 24, and 34 **Ng** teaches **'storing the new XML Schema in a web server's virtual root'** as the schema stored on computer 101 connected to the internet/network 102 (col. 4, line 53-col.5, line 5 and fig. 1).

With respect to claims 6, 16, 25, and 35 **Ng** teaches **'a limited number of tables from the database are copied to the hashtable'** as a hash of the order and customer tables (col. 6, lines 1-28).

'the database tables are compared to the tables in the hashtable' as comparing hash tables of the two database structures (col. 8, lines 10-28).

With respect to claims 7, 17, 26, and 36 **Ng** teaches **'a database metadata is copied to the hashtable'** as the hash table contains data for a particular field, including its name, type, and length (col. 5, lines 60-67).

'upon the occurrence of a query interval, the database metadata is compared to the metadata in the hashtable' as comparing hash tables of the two database structures (col. 8, lines 10-28).

With respect to claims 8, 18, 27, 37, **Srivastava** teaches **'notifying a registered party of an update to the XML Schema'** as a message sent to a user after an update is completed (0068).

With respect to claims 9, 19, 28, and 38 **Srivastava** teaches 'using a database trigger to indicate a change in the database' as a trigger service executed upon the occurrence of some events (0448).

With respect to claims 10 and 29, the limitations of these claims are similar to those of claims 1 and 20 as set forth above and are rejected in view of **Ng** for the same reasons.

Furthermore, Ng fails to teach checking the validity of a data using the XML Schema.

Srivastava however, teaches 'checking the validity of a data using the XML Schema' as input data validated by the Service Definition (0080 and 0083).

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the teaching of **Srivastava** would have provided Ng's system with ensuring system integrity. Further, Srivastava's teaching ensures proper operation (Srivastava, 0068). Further yet, using XML of Srivastava would have given Ng's system the features to create, test and validate submitted data (0060).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Timblin whose telephone number is 571-272-5627. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John E. Breene can be reached on 571-272-4107. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Leslie Wong   Robert M. Timblin

Primary Examiner   Patent Examiner AU 2167

RMT
3/22/2006